

Readers might take either of two extreme positions: this is a weird, useless code that is taxonomic fallout from the computer age; or, this may be a useful procedure since it summarizes a great deal of detailed taxonomy in a few alphabetical letters. I can sympathize with both views. As the authors point out, a similar coding approach was suggested five years ago by David Hull in *Systematic Zoology*. Except where an abbreviation is needed for data accumulation in the field, many former supporters of such a system no longer champion it strongly. Why? Because its only advantage was when much electronic information retrieval was restricted to the limits of the 80-column computer card. The third and fourth generation computers available today at most universities and research institutes (at least in the United States) handle alphabetic information retrieval tasks in a way that was rarely possible in the early days (five to ten years ago!). Coding is no longer necessary.

My point is, that while the proposed coding scheme possesses more information than just a binomial, it also is much more cryptic than a binomial. If one has to look up the code for the full hierarchical classification of a species, he might rather just look at the classification with all taxon names fully spelled out.

To summarize, the authors obviously devoted considerable time to the creation of a taxonomic code. It should prove useful as a shorthand notation *within* a computer, but it is not essential for sophisticated information retrieval. The systematist still probably will always use the binomial to retrieve information. When he wants more insights into taxonomic relations, he probably will still refer to the noncoded columns of Pryor and Johnson's classification.—THEODORE J. CROVELLO, Department of Biology, University of Notre Dame, Notre Dame, Indiana 46556.

Tremellales. By BERNARD LOWY. 153 pp., illustrated. Flora Neotropica Monograph No. 6. Hafner Publishing Company, Inc., New York. 1971. \$12.95, paper bound.

In his introduction to the monograph, Prof. Lowy recounts the history of botanical exploration of Tropical America during the 18th and 19th centuries with emphasis on mycological endeavours, and he sets forth his goal, which is not only to describe all tremellalean fungi that reliably have been reported for the region extending roughly to the 23rd parallels north and south of the equator but also to provide keys that will enable students to identify these fungi. Also discussed are the general characteristics of the Tremellales, phylogenetic relationships, methods of study, geographical distributions, and sources of material examined in preparing the monograph.

The second section of the study, Taxonomic Considerations (reproduced with minor changes from *Taxon* 17:118-127, 1968), provides a brief analysis of the taxonomic history of the Basidiomycetes from the classic macromorphologic system of classification of Fries to the micromorphologic system pioneered by Patouillard late in the 19th century. Patouillard (and Brefeld, independently) was the first to emphasize the fundamental importance of the basidium and he recognized two major groups of Basidiomycetes, the Hétérobasidiés, having septate basidia, and Homobasidiés having nonseptate basidia. Lowy discusses in greater depth the problems introduced into the classification of the Heterobasidiomycetes by genera such as *Tulasnella*, *Gloeotulasnella*, *Ceratobasidium*, *Cerinomyces*, and others, which possess characteristics that deny their being allied unequivocally with either the subclass Heterobasidiomycetidae or the subclass Homobasidiomycetidae. After a lengthy evaluation of the ideas of other students of these fungi, the author defends the establishment of a third subclass, Metabasidiomycetidae, to encompass those taxa (1) having an incompletely divided or aseptate basidium with swollen or notably enlarged sterigmata, (2) producing basidiospores germinating by repetition or by production of conidia, and (3) forming basidiocarps that may or may not be waxy or gelatinous. The more narrowly defined Heterobasidiomycetidae includes taxa having completely divided basidia with swollen or notably enlarged sterigmata,